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PATENTS
CSHL/011

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

Applicants : Anthony Zador et al.

Application No.: 10/809,285 Confirmation No.: 6056

Filed : March 24, 2004

For : SYSTEMS AND METHODS FOR SEPARATING MULTIPLE SOURCES USING DIRECTIONAL FILTERING

Group Art Unit : 2644

Examiner : Not yet known

New York, New York
April 22, 2005

Hon. Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

TRANSMITTAL LETTER FOR
INFORMATION DISCLOSURE STATEMENT

Sir:

Transmitted herewith is an Information Disclosure Statement in the above-identified application. This Statement is submitted:

[ ] within three months of the application filing date;

[X] more than three months from the application filing date but before the mailing date of the first Office Action on the merits.

In accordance with 37 C.F.R. § 1.97, submission of this Statement requires no fee. However, if for any reason a fee is due, the Director is hereby authorized to charge

payment of any fees required in connection with this Information Disclosure Statement to Deposit Account No. 06-1075. A duplicate copy of this letter is transmitted herewith.

Respectfully submitted,

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I hereby certify that this Correspondence is being deposited with the U.S. Postal Service as First Class Mail in an envelope Addressed to:
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PATENT & TRADEMARK OFFICE

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INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 C.F.R. §§ 1.56 and 1.97, applicants wish to call the attention of the Examiner to the following documents:

U.S. Patents

Linsker	6,317,703 B1	11/13/01
Jourjine et al.	6,526,148 B1	02/25/03

Other Documents

Bell, Anthony, et al., "The 'Independent Components' of Natural Scenes are Edge Filters", Vision Research, vol. 37(23), pp. 3327-3338, 1997.

Bofill, Paul, et al., "Underdetermined Blind Source Separation Using Sparse Representations", Signal Processing, vol. 81(11), pp. 2353-2362, 2001.

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Fletcher, R., "Semidefinite Matrix Constraints in Optimization", SIAM Journal of Control and Optimization, vol. 23, pp. 493-513, 1985.

Hochreiter, Sepp., et al., "Monaural Separation and Classification of Mixed Signals: A support-vector regression Perspective", 3rd International Conference on Independent Componenet Analysis and Blind Signal separation, San Diego, California, December 9-12, pp. 498-503, 2001.

Hofman, P.M., et al., "Bayesian Reconstruction of Sound Localization Cues from Responses to Random Spectra", Biological Cybernetics, vol. 86(4), pp. 305-316, 2002.

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King, A.J., et al., "Plasticity in the Neural Coding of Auditory Space in the Mammalian Brain", Proc. National Academy of Science in the USA, vol. 97(22), pp.11821-11828, 2000.

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Kukkarni, A., et al., "Role of Spectral Detail in Sound-Source Localization", Nature, vol. 396(6713), pp. 747-749, 1998.

Lee, T.W., et al., "Blind Source Separation of More Sources than Mixtures Using Overcompete Representations", IEEE Signal Processing Letters, vol. 4(5), pp. 87-90, 1999.

Lewicki M.S., et al., "Learning Overcomplete Representations", Neural Computation, vol. 12(2), pp. 337-365, 2000.

Lewicki, M., et al., "Inferring sparse, Overcomplete Image Codes Using an Efficient Coding Framework", In Advances in Neural Information Processing Systems 10, pp. 815-821, MIT Press, 1998.

Linkenhoker, B.A., et al., "Incremental Training Increases the Plasticity of the Auditory Space Map in Adult Barn Owls", Nature, vol. 419(6904), pp. 293-296, 2002.

Olshausen, B.A., et al., " A new Window on Sound", Nature Neuroscience, vol. 5, pp. 292-293, 2002.

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Riesenhuber, Maxmilian., et al., "Models of Object Recognition", Nature Neuroscience, Supplement, vol. 2, pp.1199-1204, 2000.

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Shinn-Cunningham, B.G., "Models of Plasticity in Spatial Auditory Processing", Audiology and Neuro-Otology, 2001, pp. 187-191, Vol. 6(4).

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Yost, Jr., W.A., et al., "A Simulated 'cocktail party' With Up to Three Sound Sources", Percept Psychophys, vol. 58(7), pp. 1026-1036, 1996.

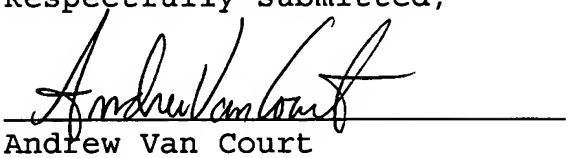
Zibulevsky, Michael, et al., "Blind Source Separation by Sparse Decomposition in a Signal Dictionary", Neural Computation, vol. 13(4), pp. 863-882, April 2001.

The aforementioned documents are listed on the accompanying Form PTO/SB/08A (submitted in duplicate) and pursuant to 37 C.F.R. § 1.98(a)(2), copies of the non-U.S. Patent documents are enclosed herewith.

It is respectfully requested that the above documents be (1) fully considered by the Patent and Trademark Office during examination of this application, and (2) printed on any patent which may issue on this application. Applicants request that a copy of Form PTO/SB/08, as considered and initialed by the Examiner, be returned with the next communication.

Consideration of the foregoing in relation to this patent application is respectfully requested.

Respectfully submitted,



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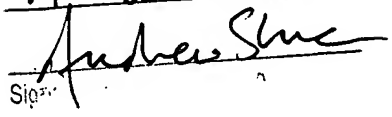

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PTO/SB/08A (10-01)
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Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANTS

(use as many sheets as necessary)

Sheet 1 of 2

Complete if known	
Application Number	10/809,285
Confirmation No.	6056
Filing Date	March 24, 2004
First Named Inventor	Anthony Zador et al.
Art Unit	2644
Examiner Name	Not yet assigned
Attorney Docket Number	CSHL/011

U.S. PATENT DOCUMENTS

Examiner initials*	Cite No.[1]	Document Number Number – Kind Code[2] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Documents	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-6,317,703 B1	11/13/01	Linsker	
		US-6,526,148 B1	02/25/03	Jourjine et al.	

Examiner Signature		Date Considered	

NON PATENT LITERATURE DOCUMENTS

Examiner initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T[6]
		Bell, Anthony, et al., "The 'Independent Components' of Natural Scenes are Edge Filters", Vision Research, vol. 37(23), pp. 3327-3338, 1997.	
		Bofill, Paul, et al., "Underdetermined Blind Source Separation Using Sparse Representations", Signal Processing, vol. 81(11), pp. 2353-2362, 2001.	
		Cauwenbergs, G., "Monaural Separation of Independent Acoustical Components", In Proceeding IEEE International Symposium on Circuits and Systems (ISCSS'99), Orlando, Florida, vol. 5 of 6, pp. 62-65, 1999.	
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		Jang, Gil-Jin, et al., "A Maximum Likelihood Approach to Single-Channel Source Separation", Journal of Machine Learning Research, vol. 4., pp. 1365-1392, December 2003.	

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.
[1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language translation is attached.

Substitute for form 1449/PTO				Complete if known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANTS				Application Number	10/809,285
				Confirmation No.	6056
				Filing Date	March 24, 2004
				First Named Inventor	Anthony Zador et al.
(use as many sheets as necessary)				Art Unit	2644
				Examiner Name	Not yet assigned
Sheet	2	of	2	Attorney Docket Number	CSHL/011

		King, A.J., et al., "Plasticity in the Neural Coding of Auditory Space in the Mammalian Brain", Proc. National Academy of Science in the USA, vol. 97(22), pp.11821-11828, 2000.	
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Examiner Signature		Date Considered	